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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,872	08/10/2004	Chien-Hua Hsu	MTKP0126USA	4871
27765 7590 11/21/2007 NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION P.O. BOX 506 MERRIFIELD, VA 22116			EXAMINER PHU, PHUONG M	
			ART UNIT 2611	PAPER NUMBER
			NOTIFICATION DATE 11/21/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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mis.ap.uspto@naipo.com.tw

## Office Action Summary

**Application No.**

10/710,872

**Applicant(s)**

HSU ET AL.

**Examiner**

Phuong Phu

**Art Unit**

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-11 and 13-25 is/are rejected.
- 7) ☒ Claim(s) 3,4,12 and 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 8/24/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Objections***

2. Claim 13 is objected to because of the following informalities:

Claim 13 recites the limitations "the buffer" on lines 3 and 6. These limitations are lacked of antecedent basis. These limitations are suggested to be changed to --the input-- for referring to "input", which is previously recited in claim 9, line 6.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 5-11, 13-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Sogabe et al (2002/0027845).

-Regarding claim 1, Sogabe et al discloses a method (see figure 3) for locating a synchronization signal "Next synchronization signal" (see (27)) of a next frame in a digital encoded signal (100) (see figure 2A), the digital encoded signal comprising a plurality of frames (110), each frame comprising the synchronization signal (111), the method comprising:

procedure (20, 24, 27) (see figure 3) utilizing “First synchronization signal address” in a content of storage (24) to determine a search region “search area” (see (S405-S411, S415) of figure 4, [0085-0105]), (the content of storage considered here equivalent with the limitation “lookup table”); and

procedure (20, 27) of locating the synchronization signal of the next frame in the search region in the digital encoded signal (see figure 5B, [0096, 0097, 0107-0109]).

-Regarding claim 2, Sogabe et al discloses procedure (26) of receiving a bit-rate signal and a sampling-rate signal in a current frame of the digital encoded signal (see [0094]); wherein the method utilizes the lookup table to determine the search region according to the received bit-rate signal and the sampling-rate signal (see [0094-0096]).

-Regarding claim 5, Sogabe et al discloses that locating the synchronization signal of the next frame comprises searching a predetermined data pattern “0xfff” in the search region (see [0085]), (the searching considered here equivalent with the limitation “backward-searching”).

-Regarding claim 6, Sogabe et al discloses that locating the synchronization signal of the next frame comprises searching a predetermined data pattern “0xfff” in the search region (see [0085]), (the searching considered here equivalent with the limitation “forward-searching”).

-Regarding claim 7, Sogabe et al discloses that locating the synchronization signal of the next frame comprises searching the predetermined data pattern “0xfff” matched for a first time in the search region (see [0085]), (the searching considered here equivalent with the limitation “backward-searching”).

-Regarding claim 8, Sogabe et al discloses that the digital encoded signal is generated according to MPEG audio standard “MP3” (see figure 2A, [0005, 0085]).

-Regarding claim 9, as similarly applied to claims 1, 2, 5-8 set forth above and herein incorporated, Sogabe et al discloses an apparatus for searching a synchronization signal of a next frame in a digital encoded signal, the digital encoded signal comprising a plurality of frames, each frame comprising the synchronization signal, the apparatus (1) (see figure 1, [0056]) comprising:

an input (10) (see figure 1) for receiving the digital encoded signal; and

a searching module (20) (see figures 1 and 3) coupled to the input for determining a search region used to search the synchronization signal of the next frame according to a lookup table and for determining, in the search region, the position of the synchronization signal of the next frame.

-Claim 10 is rejected with similar reasons set forth for claim 2.

-Regarding claim 11, Sogabe et al discloses that the searching module comprises a memory unit (included in (24)) for storing the lookup table (see figure 3).

-Regarding claim 13, Sogabe et al discloses that the searching module further comprises: a header detector (26) coupled to the input for receiving the bit-rate signal and the sampling-rate signal in the current frame; and a searching device (comprising (24, 27)) coupled to the input and the memory unit for determining the position of the synchronization signal of the next frame in the search region in the digital encoded signal (see figure 3).

-Claim 14 is rejected with similar reasons set forth for claim 5.

-Claim 15 is rejected with similar reasons set forth for claim 6.

-Claim 16 is rejected with similar reasons set forth for claim 7.

-Claim 17 is rejected with similar reasons set forth for claim 8.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 18-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sogabe et al in view of Lokhoff (5,777,992).

-Regarding claim 18, as similarly applied to claims 1, 2, 5-11, 13-17 set forth above and herein incorporated, Sogabe et al discloses a method for decoding a digital encoded signal having frames (see figure (2A) each comprising a header (111, 112), the header includes a synchronization signal (111) and an index signal (115, 117), the method (see figure 3) comprising:

procedure (26) (see figure 3) of receiving the bit-rate signal and the sampling-rate signal (see (115, 117) of figure 2A);

procedure (20, 24, 27) (see figure 3) of determining a search range according to the bit-rate signal and the sampling-rate signal; and

procedure (20, 27) (see figure 3) of locating the synchronization signal "Next synchronization signal" of a next frame by searching a predetermined data pattern "0xffff" in the search region, (the searching considered here equivalent with the limitation "backward searching").

Sogabe et al does not teach that the header includes a frame-length indication signal, the frame-length indication signal indicates whether a current frame has a first length or a second length different from the first length, as claimed.

However, Sogabe et al teaches that the header can include additional information signal (see (...) shown in figure 2A).

On a similar endeavor, Lokhoff teaches that a header of a frame can include frame-length indication signal, e.g. "system information" or "type of frames" (see col. 7, line 50 to col. 8, line 8), which indicates the frame length that might be different from other frames.

It would have been obvious for one skilled in the art to implement Sogabe et al in such a way that the header would include additional information signal(s) for indicating frame length, as taught by Lokhoff so that the frame would carry more information about the frame's format, (the additional information signal(s) considered here equivalent with the limitation "a frame-length indication signal, the frame-length indication signal indicates whether a current frame has a first length or a second length different from the first length").

-Regarding claim 19, Sogabe et al discloses that the the index signal includes a bit-rate signal (115) and a sampling-rate signal (117) (see figure 2A).

-Claim 20 is rejected with similar reasons set forth for claim 2.

-Regarding claim 21, Sogabe et al discloses procedure (26) of comparing a position "address" of the synchronization signal of the next frame with a position "address" of the synchronization signal of the current frame to determine the length of the current frame "the length of a variable frame length" without the need of referring to the frame-length indication signal (see [0080]), (the determining considered here equivalent with the limitation " determine

whether the current frame has the first length or the second length without the need of referring to the frame-length indication signal”).

-Regarding claim 22, Sogabe et al in view of Lokhoff discloses that the frame-length indication signal can include a bit a padding bit defined in MPEG audio standard (see Sogabe et al figure 2A, and Lokhoff, "Bit 24" (shown in figure 7) and col. 7, line 66 to col. 8, line 10), (the bit considered here equivalent with the limitation "padding bit").

-Regarding claim 23, as similarly applied to claims 1, 2, 5-11, 13-22 set forth above and herein incorporated, Sogabe et al discloses a method for determining a frame length of a current frame in the process of decoding digital encoded signal, the digital encoded signal include frames each comprising a header, the header includes a synchronization signal and an index signal, the method comprising:

procedure (26) (see figure 3) of receiving the index signal (see (115, 117) of figure 2A);

procedure (20, 24, 27) (see figure 3) of determining a search range according to the index signal by referring to a lookup table;

procedure (20, 27) (see figure 3) of locating the synchronization signal of a next frame by searching a predetermined data pattern “0xffff” in the search region; and

procedure (26) of comparing a position of the synchronization signal of the next frame with a position of the synchronization signal of the current frame to determine whether the current frame has the first length or the second length without the need of referring to the frame-length indication signal.



Sogabe et al does not teach that the header includes a frame-length indication signal, the frame-length indication signal indicates whether a current frame has a first length or a second length different from the first length, as claimed.

However, Sogabe et al teaches that the header can include additional information signal (see (...) shown in figure 2A).

On a similar endeavor, Lokhoff teaches that a header of a frame can include frame-length indication signal, e.g. "system information" or "type of frames" (see col. 7, line 50 to col. 8, line 8), which indicates the frame length that might be different from other frames.

It would have been obvious for one skilled in the art to implement Sogabe et al in such a way that the header would include additional information signal(s) for indicating frame length, as taught by Lokhoff so that the frame would carry more information about the frame's format, (the additional information signal(s) considered here equivalent with the limitation "a frame-length indication signal, the frame-length indication signal indicates whether a current frame has a first length or a second length different from the first length").

-Claim 24 is rejected with similar reasons set forth for claim 7.

-Claim 25 is rejected with similar reasons set forth for claim 19.

***Allowable Subject Matter***

7. Claims 3, 4, 12 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Phu whose telephone number is 571-272-3009. The examiner can normally be reached on M-F (8:00 AM - 4:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*Phuong Phu*

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11/09/07

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